#### **REMARKS**

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 102, 104-105, and 108-135 are amended.

Claim 103 is requested to be cancelled.

Claims 136-167 are being added.

After amending the claims as set forth above, Claims 102, 104-105, and 108-167 are now pending in this application, of which Claims 102, 121, 128, 150, 154, 159, and 162 are independent.

#### **Amendments**

Claims 102, 104-105, and 108-135 are amended. These amendments are believed to be supported by the specification. Further, these amendments are being made to simplify and/or clarify the language used in various claim elements that have been added during prosecution.

#### Claim Rejections – 35 USC § 103(a)

In part 4 of the Office Action, Claims 102, 104, 105, and 108-135 were rejected under 35 USC § 103(a) as being unpatentable over either Henderson et al (4,261,257) or Miller (4,530,276) in view of Stanger et al (5,931,083), Ledet et al (5,410,951), and Applicants' discussion of prior art (presumably the discussion in the present application's Background section).

#### A. Claims 102, 104, 105, and 108-135

As recognized in paragraph 2 of the Office Action, the inquiry in determining obviousness under 35 USC § 103(a) includes considering objective evidence of Non-obviousness. See MPEP 2141 ([T]he four factual inquiries [under Graham] ... for

determining obviousness are as follows ... (D) Evaluating evidence of secondary considerations.). See also, MPEP 716.01(a).

In this case, the objective evidence / secondary considerations suggest that the invention as claimed in Claims 102, 104, 105, and 108-135 are not obvious under 35 USC § 103(a). These secondary considerations include the commercial success of and the copying by others of the assignee's commercial product which led to the present application.

The commercial success of the current contact toaster belt sold by Saint-Gobain demonstrates that the inventions claimed are not obvious.

An applicant showing commercial success must also show a nexus between the commercial success and the claimed invention. See MPEP 716.03. In this case, a nexus does exist between commercial success and the claimed invention.

The current belt sold by Saint-Gobain (Chemfab)<sup>1</sup> for use in contact toasters has achieved commercial success as a result of the novel aspects of the claims. Attatchment #6 at paras 7-10. In particular, belts used in apparatuses not meeting the claims of the current application were found to be unsatisfactory by at least one major customer for these belts. Attatchment #6 at para 8. However, the re-designed belt used in apparatuses meeting the claims of the present application have achieved commercial success. Attatchment #6 at para 9. One important feature found in the re-designed belts was the use of ribs, including the use of ribs on both sides of the belt. Attatchment #6 at para 9.

In addition to commercial success, copying by others after Chemfab's introduction of the belts helps demonstrate that the claimed invention was not obvious. In this case, at least two separate instances of copying by others have occurred.

The first instance occurred around the time of the initial development of the belt that led to the present application, and involves a company named Furon.<sup>2</sup> Furon appears to have

<sup>&</sup>lt;sup>1</sup> As shown in the assignment records, Chemfab was merged with Saint-Gobain after the filing of the present application).

<sup>&</sup>lt;sup>2</sup> At the time of development of the belt (including the time the copying occurred), Chemfab and Furon were competitors. Both Chemfab and Furon have subsequently been acquired by Saint-Gobain.

repeatedly tried and failed to create an acceptable belt for a contact toaster to compete with Chemfab's re-designed contact toaster belt (which belt led to the present application). See Attatchments #1-3. After being shown Chemfab's re-designed belt, and after it was apparent that Chemfab's belt was likely to be successful, it appears that Furon decided that a potential action to stay competitive with Chemfab was to copy Chemfab's belt. See Attatchments #4-5.

Documents appear to suggest that Furon first developed a smooth-faced belt for a contact toaster using 7628 fiberglass in July, 1998. See Attatchment #1. Documents further appear to suggest that when that belt failed to be successful, Furon developed a belt using 1564 fiberglass which appears to have had a more textured patterned (potentially due to thicker fibers in a reinforcement fabric) but still no ribs. See Attatchment #2. Documents also appear to suggest that around January, 1999, when the 1564 belt also failed to be successful, Furon proposed using an even more texturized belt as a solution. See Attatchments #2-3. Around February of 1999, other documents appear to suggest that Furon first saw the Chemfab re-designed belt that is the subject of the present application. See Attatchment #4. The documents appear to suggest that Furon's approach was proving unsuccessful, and in response to seeing Chemfab's proposed design, Furon decided to copy the design proposed by Chemfab. See Attatchments #4-5.

The fact that Furon proposed solutions which do not appear to meet the present claims, failed more than once to create a successful product, and then decided to copy Chemfab's design which was a successful product are factors that show that Chemfab's design (as claimed in the present application) was not obvious.

In addition to the copying by Furon, a second instance of copying has occurred more recently by a company named Advanced Flexible Composites ("AFC"). Instead of practicing the prior art, AFC has copied the design developed by Chemfab which is the subject of the present application. The AFC belts are fiberglass belts having silicone rubber coatings. See Attatchment #7 at paras 5-6. The belts have wavy (sinusoidal type) ribs raised above the first face of the belt. See Attatchment #7 at para 7. The belts also have ribs raised above the second face of the belt. See Attatchment #7 at para 8. As can be seen in the attached

pictures of the AFC belts, the ribs raised above the second face are straight and parallel to each other. See Attatchment #8.

The fact that AFC has decided to copy Saint-Gobain's design rather than practice the prior art or develop its own design further indicates that the design as claimed in the present application is not obvious.

Given the objective evidence of non-obviousness, including the commercial success of the product claimed in the present application and the at least two instances of copying of the claimed inventions by others, withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

#### B. Claim 105

Claim 105 recites that the apparatus "comprises a second belt, wherein the first belt is mounted such that the second plurality of flights contact the second belt and the first plurality of flights contact food items." It is not clear where the office action states that this element is shown in the prior art. More importantly for the present Office Action, this element is relevant to the motivation proposed by the Office Action for including flights on both sides of the belt.

In concluding that it was obvious to include flights on both sides of a belt, the Office Action states that one of ordinary skill in the art would be "motivated by the fact that belts are typically driven by a sprocket type wheel." However, Claim 105 recites that the second plurality of flights are configured to contact a second belt, contrary to the motivation cited in the office action.

Additionally, as discussed above, the Chemfab belt which led to the present application has been commercially successful. See Attatchment #6 at paras 6-8. This Chemfab belt is designed to be used on an apparatus with a second belt arranged as recited in Claim 105. See Attatchment #6 at paras 9-10.

Given that claim 105 recites an element that contradicts the motivation cited in the Office Action, withdrawal of the rejection is respectfully requested.

#### C. Claim 109

Claim 109 recites that "flights raised above one face are straight and parallel to each other and a longitudinal direction of the flights is transverse to a longitudinal direction of the belt, and ribs raised above another face are arranged in a repeating pattern that is at least one of undulating and sinusoidal."

The Office Action states that "[t]he limitations as to ... the pattern of the flights is deemed obvious to a skilled artisan since Stanger et al teaches that the ribs can be any shape or pattern." However, Stanger et al. fails to teach or suggest that flights can be a <u>different pattern</u> on one side of a belt than on another side of the belt, let alone that on one side of the belt the flights are straight and on the other side of the belt ribs are one of undulating and sinusoidal.

Further, the other references cited in the rejection also appear to fail to teach or suggest that flights on one side of the belt have a different pattern than ribs on another side of the belt. For example, Henderson et al and Miller both appear to teach link belts which do not have different patterns on each side of the belt. Further, Ledet et al. appears to show a belt having straight ribs on both the top and bottom surfaces of the belt of Ledet et al.

Additionally, as discussed above, the Chemfab (Saint-Gobain) belt which led to the present application has been commercially successful. See Attatchment #6 at paras 6-8. This Chemfab belt includes ribs with patterns as recited in Claim 109. See Attatchment #6 at para 10. This combination of patterns was also copied by at least one competitor. See Attatchments #7-8.

Since none of the references themselves teach at least one element of Claim 109, and since nothing in the combination of the references suggests inclusion of an element not taught or suggested in any of the references individually, withdrawal of the rejection of Claim 109 is respectfully requested.

#### **New Claims**

Claims 136-167 are believed to be supported by the specification as filed. Independent Claims 150, 154, 159, and 162 are supported in the specification in at least the same locations as least Claim 128.

The following table includes citations to at least some of the places that provide support for the added claims:

Added Claim	Support in Specification
136	See paragraphs [0035], [0036], [0041], [0043], [0054], and [0062]
137	See paragraphs [0043] and [0054]
138	See paragraph [0037]
139	See paragraph [0009]
140-145	See paragraphs [0025] and [0054]
146	See paragraph [0055]
147	See paragraph [0009]
148	See paragraph [0020]
149	See paragraph [0041]
150	See Claims 128 and 135, and see paragraphs [0015], [0026], [0042],
	[0043], [0053], and [0054]
151-153	See paragraphs [0041]-[0043], [0053], and [0054]
154-159	See Claim 128 and paragraphs [0054] and [0062]

160	See paragraphs [0007] and [0042]-[0044]
161	See paragraph [0042]
162	See Claim 128
163	See paragraphs [0035], [0036], [0041], [0043], [0054], and [0062]
164	See paragraph [0055]
165	See paragraph [0054]
166	See paragraphs [0066] and [0069]
167	See paragraphs [0058] and [0060]

Also, Claims 136-167 are believed to recite combinations of elements not taught or suggested by the cited art, and are believed to be in condition for allowance.

Independent Claims 150, 154, 159, and 162 recite elements similar to (although not identical to) Claim 128.

Claims 136, 137, 140, 150, 155, 159, and 163 further recite elements similar to (although not identical to) Claim 105.

Claims 136, 143, 150, 157, and 163 further recite elements similar to (although not identical to) Claim 109.

Additionally, the objective evidence of non-obviousness discussed above is applicable.

#### Litigation

US Patent No. 6,919,122, which is the parent of the present application, is currently involved in litigation. Documents related to that litigation will be included in an IDS being filed within the next few weeks.

#### Conclusion

Applicant believes that the present application is in condition for allowance. Given the number of non-final Office Actions issued in this case, the Examiner is strongly invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

#### Miscellaneous

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

Respectfully submitted,

Date <u>March</u> 9, 2006

FOLEY & LARDNER LLP

Customer Number: 26371

Telephone:

(414) 297-5839

Facsimile:

(414) 297-4900

Marcus A. Burch

Attorney for Applicant Registration No. 52,673

# INITIAL BEST AVAILABLE COPY PRODUCT DEVELOPMENT REQUEST

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# **FURON**

#### Fax Cover Sheet

Post-It Fax Note 7671 Date Of 22-97 # of 3

To SAL CASADONNE From DATRICK WARTH

Co/Dept. Co.

Phone #203-773-2873 Phone #847-991-7743

Fax # 203-787-1725 Fax 8 847-991-7753

**Phone**: 203-773-2851

**Phone**: 847-991-7743

: 203-498-2834

: 847-991-7753

Date

: January 21, 1999

**Pages** 

: 3

Including Cover

To

: Art Rogove

SBU Technical Director

Furon

407 East St.

New Haven, CT 06511-5015

From

: Patrick R. Wirth

Account Manager

Furon

1174 N. Chesapeake Ln. Palatine, IL 60067-3144

CC

: Steve Fuessle

Subject

: A.J. Antunes - Project No. E9800547

Art,

Attached you will find a request for developing a new belt design to satisfy our customers requirements.

Fax

Fax

The current belt on test is made from 1564 Glass and has failed. It failed after approximately one month because the belts surface became slick and would not pull the buns through the toaster. The belts surface turned slick because of the build up of sugars and oils from the bread.

The original belt was made from 7628 Glass and failed after approximately one month. This belt was smooth to begin with but had a tacky surface which assisted in pulling the buns through the toaster. This belts surface also turned slick after time because of the build up of sugars and oils from the bread.

Antunes would like Furon to develop a belt that requires no cleaning. This is why we must look at developing another belt with a more textured surface, adding glass bead to the resin, or a combination of both. Chemfab is the current supplier, but doesn't seem as interested in solving this problem (probably to busy with the Tent City project to care). Current requirements are two (2) belts per toaster, and they are producing 500-600 toasters per week.

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Bristol Fex: (401) 253-176	0 Mundelein Fax: (847) 949-0198 Anaheim Fax: (714) 630-6632 TSR NO. NH 600
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A COMBINATION OF BOTH.	
ENGINEERING RESPONSE:	

# BEST AVAILABLE COPY

#### Rogove, Art

From:

Wirth, Patrick

Sent:

Friday, January 22, 1999 12:39 PM

To:

Casadonte, Sal; Rogove, Art; Swift, Woody

Cc:

Fitchett, Neil; Fortune, Dan; Fuessle, Steve; Hautop, Ken R.; Joslin, Donna; Messick, Rob;

Schwarz, Niels; Wirth, Patrick

Subject:

RE: LSR trial 01/21/99

#### Everyone,

I want to follow up with you on the latest feedback from the Antunes -McDonald's toaster project. The current belt used in production is a Chemfab belt made from 7628 Glass with a smooth & tacky surface finish. In order to use this belt for any length of time it must be cleaned on a regular basis. Antunes would like to avoid having McDonald's personnel clean the belts. It would also be a great selling point if they could advertise that their belt does not require cleaning.

For our initial prototype we made a belt very similar to the Chemfab belt, but Antunes discovered that this type of belt looses it's tacky finish within a month. The reason it lost it's tacky finish was due to all the sugar & oil buildup obtained from the buns.

This is when Antunes asked us to provide another belt design with more texture. The idea was that with more texture the belt would pull the buns through the toaster without any need for a tacky surface which requires continuous cleaning. We then supplied Antunes with a belt made of 1564 Glass without a tacky surface. This belt also failed in testing after one month for the same reason as stated above.

Antunes would now like Furon to develop a belt with either a glass type that has even more texture, or possibly adding glass bead to the resin, or some combination of both. Antunes stated that Chemfab does not seem as interested in solving this problem.

Current production requirements are two (2) belts/toaster, and Antunes is producing 500-600 toasters/wk. Antunes is currently a \$100K customer with potential to be \$500-750K customer if we can land this belt business.

#### Patrick

From: Casadonte, Sal / usa To: Boll, Chris / usa; Fitchett, Neil / usa; Fortune, Dan / usa; Fuessle, Steve / usa; Messick, Rob / usa; Rogove, Art / usa; Swift, Woody / usa; Wirth, Patrick / usa Subject: LSR trial 01/21/99 Date: January 22, 1999 8:34AM

Three LSR coated fabric samples were run on Thursday. Great improvements were made over the last trial.

Sample #1 - 16 yards of black food belt on 1564 glass overall thickness = 18 mils color is black throughout - much better than last run due to increased pigment levels surface is textured and tacky with no air 'blowholes' a swatch was sent to Dan Fortune overnight and the roll was sent to Steve Fuessle

Sample #2 - 16 yards of black food belt on Fothergill 'Saudi Tent' textured glass - this glass incorporates a repeating square pattern in the weave that provides a textured surface overall thickness = 23-24 mils color is black surface is textured due to square pattern with no air 'blowholes'

a swatch was sent to Dan Fortune overnight

Rugert 799 E980499

re on the PDR and in their print. Chemfab is currently the sole supplier, and we have an excellent opportunity to be the second or even primary supplier. Even as second source, the volume is huge. Please let me know if you have any questions and advise possibility of making a trial run. Thanks,

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<<File: ANTU-PDR.DOC>>

Neil

2



# Memorandum



# LEST AVAILABLE COPY

McCaffrey Street P.O. Box 320 Hoosick Falls, NY 12090-0320 518.686.7301 Fax: 518.686.3161

DATE:

2/20/99

TO:

List

FROM:

Neil Fitchett

SUBJECT:

Call report on A.J. Antunes

Opportunity \$400 - \$1000K / yr

List:

Patrick Wirth

Neils Schwartz Steve Fuessle

Ken Hautop Charlie Boyle

Rob Messick

Art Rogove

Sal Cassadonte Woody Swift

Ed Scheytt

George Lucia

Call was made to A.J. Antunes in Chicago to discuss status of the toaster belt and determine next steps. Met with Scott Marsh Project Manager and Horatio Garcia, buyer. Present from Furon were myself, Patrick Wirth, and Steve Feussle.

Parameters have changes for this opportunity in the last month. The tacky surface once desired is out in favor of a textured or pattern on the surface for traction on the buns, and positive drive to the belt. Antunes has determined that the tacky finish attracts dirt and food debris too quickly and although a good short term performer, will not give them the longer life they desire. Also it's too difficult to clean, and restaurants are complaining.

In the past month both Chemfab and Taconic have become very aggressive with this account. Scott said that both have submitted several very creative solutions to the problem, two of which are serious considerations and going out to test facilities this week and next. Chemfab is working on silicone glass solutions and Taconic is concentrating on a PTFE glass solution. The Furon black LSR on the 1564 glass and the tent city fabric is not a consideration at this time.

Scott took us into the assembly room where there were perhaps a hundred toaster machines at various stages of assembly. All machines had two of the current red LSR belt from Chemfab that is being replaced by whatever is chosen from the trials. He took one apart and described the functional parameters of the belt. He also gave us a toaster machine which is currently at Mundelein.

Mechanical application: The machine is designed with two vertical chain link belts, one on each side of the toaster platen, that travel on sprocket pulleys. There are 3/16" diameter steel rods every ¾" that go across the width. Our silicone glass belt simply wraps around the outside of this chain link belt to cover the steel rods and act as the primary food contact surface. There is no mechanical connection with the chain link belt to avoid slippage and Antunes would rather not have one, for ease of installation. There are adjustable pressure plates on the inside of the chain link belt to provide the right amount of pressure to the buns as they slide on the toaster platen. There is also an idler roll applying pressure to the opposite (return) side of the belt to take up any slack. Primary heat is supplied from the platen which is set at 560 degrees F. Auxiliary heat is supplied from cal rods inside the chain link belt to warm the belt and therefore the bun from both sides. For this reason, an open mesh belt is not an option because of the heat loss factor. It is important the belt retains heat on the return side.

Primary Failure modes: The primary failure occurs when the buns loose traction on the silicone belt and are not pulled into the toaster. Also when the silicone belt looses traction on the chain link belt

# BEST AVAILABLE COPY

and stops motion all together. Secondary failure occurs when belts are so clogged with food they cannot be properly cleaned. Ideal performance would be 3 - 5 months with a minimum of cleaning.

Competitive belts: Scott was very open about showing us what Chemfab and Taconic are proposing. This was a 180 degree turnaround from just two weeks ago. I believe he sincerely wants Furon in the race. Taconic is proposing a PTFE glass belt that has either been filled with a very heavy particle filler, or perhaps a highly textured glass. After coating, it looks and feels like a 60 grit sand paper. Very rough. They presented several variations of this textured fabric from fine to course. They all do the job quite well, but the heaviest textures are transferring impressions to the bun. They will field test a medium texture in restaurants starting next week. Chemfab is working on variations of the LSR silicone glass belts. The front runner from Chemfab has what looks like a silicone bead running straight across the belt on the underside to fit the chain link. It also has a series of silicone beads going across the belt in a wave pattern on the bun side. It still appears to be made of the same red iron oxide LSR coating, and looks like the beads may have been formed in the coating process of the fabric. This belt is going into field test this week.

Recommendations: Act fast! Scott is giving us an opportunity to be in this but our window is about 3 weeks maximum. He has to declare a winner in March. We should come in with two or three different options, on our next visit. Perhaps from both the silicone and PTFE sides since we excel in both areas. Possible solutions to discuss:

- 1. Run the current LSR fabric on 1564 glass with some type of linear scraping of the coating prior to curing, every ¾". The idea is to create lines or beads on the finished product in the warp direction. Belts would then be cut across the width of the fabric (belts are only 32" long) providing a pattern that would mesh with the chain link belt and give traction to the buns. Other texturing methods should be considered.
- 2. Blend some kind of silicone particles (or chunks if you will) into the LSR mix that will stand up on the fabric, providing an overall rough texture.
- 3. Coat the LSR on to 7544 glass 1589 glass or other heavy weave glass styles to give the heaviest possible texture.
- 4. Experiment with various fillers on PTFE glass coatings to enhance the texture and roughness. Similar to the Brunswick fabric.

It should be noted that as of this meeting, Antunes seems to favor the red iron oxide pigment/filler. Right or wrong, they think it enhances the temp capability and life of the belt. Technical discussions should happen this week to plan our options.

Neil Fitchett

ve, Art

From:

Fitchett, Neil

Sent:

Tuesday, March 02, 1999 4:05 PM

To:

Casadonte, Sal, Panuccio, Vincent; Swift, Woody

Cc:

Rogove, Art, Wirth, Patrick

Subject:

Antunes

Per our conversation yesterday and for the record, We should make the trial run of LSR on 1564 glass with the "speed bumps" in the FDA black if it's available. If the black is not here come Friday 3/5, we run it anyway in red. I don't want to hold up the trial run waiting for the black pigment, Antunes will look at it either way. Using what little black we have in stock is not an option. I don't want it to look anemic. The 7544 glass was sent to New Haven on 2/24/99 on Fed EX P1, tracking number 8038 7546 1953. It was one roll, 50 yds, 76 lbs. sent to 407 East Street. Your name is on the box. Please let me know that you have it, or if we need to go searching.

How are the wiper blades for creating the bumps coming? Any questions, or any way I can help, please let me know. Keep in mind the bumps have to occur on both sides of the belt, so two blades will be needed.

Thanks all, Neil



#### **DECLARATION UNDER 37 CFR § 1.132**

- 1. I am currently employed by Plaintiff Saint-Gobain Performance Plastics Corporation ("Saint-Gobain") as Sales Manager, Food Processing Products, and am one of four named inventors of the present application.
- I worked for Chemfab Corporation starting in 1980 and, with the exception of a four and a half year period in the mid-80s, have worked for Chemfab, companies owned by Chemfab, or Saint-Gobain (which acquired Chemfab) ever since. Starting in mid-1998, I was the national sales manager for Chemfab, and was Chemfab's key accounts manager for major accounts including McDonald's.
- 3. I have reviewed the claims that are currently pending in this application including the claims added in the current Amendment and Reply.
- 4. I am familiar with the AFC DuraChef belt discussed in the January 16, 2006 Declaration of Ruth Jamke. Those belts are designed for use in a contact toaster, and are used as a belt wrap for VCT series contact toasters made by AJ Antunes (such as the VCT-20).
- 5. In April of 1997, it was estimated based on the number of AJ Antunes VCT toasters in the US that there may be 120,000 toaster belts sold per year and/or may have presented sales of \$1.6 million. In May of 1999, it was estimated based on the potential number of AJ Antunes VCT toasters worldwide that there was an opportunity worldwide to sell 375,000 toaster belts per year and/or may have presented sales opportunities of \$6.2 million. Also, in May of 1999 there was thought to be interest from additional large fast-food chains to purchase the Antunes toaster.
- 6. The Chemfab (now Saint-Gobain) belts have been commercially successful. Chemfab/Saint-Gobain has sold at least \$3.0MM dollars of belts (gross sales) over each of the past few years. Chemfab/Saint-Gobain's belts for contact toasters have accounted for at least about 85% percent share of the market for these belts (for use in the quick serve food industry for toasting buns in vertical contact toasters) over the last few years. The remaining percent of the market is believed to be taken up by AFC's copycat belt, discussed above in paragraph 4.

**BLUT AVAILABLE COPY** 

- 7. The inclusion of ribs on the belt manufactured by Chemfab (now Saint-Gobain) was a key element required to achieve the commercial success discussed in paragraph 5. This is discussed more in paragraphs 7-9, below.
- 8. An original belt sold by Chemfab for use with the contact toasters sold by AJ Antunes did not include any ribs on either side of the belt. This original belt was found to be unsatisfactory by at least one major customer.
- 9. The current belt sold by Chemfab/Saint-Gobain which has achieved the commercial success discussed in paragraph 5 includes ribs on the belt. The re-design of the belt to include the ribs on the belt is a major contributing factor to the success of the current belt.
- 10. The redesigned belt is intended for use in VCT series contact toasters sold by AJ Antunes such as the VCT-20. The original belt sold by Chemfab was also intended for use in VCT series contact toaster sold by AJ Antunes.
- 11. When the redesigned belt is used on an AJ Antunes VCT toaster as intended, the combination meets all of the elements of Claims 102, 104, 105, 108-137, 139-144, and 146-166.
- 12. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC §1001.

Signature Name (Print) Date

# UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

SAINT-GOBAIN PERFORMANCE PLASTICS CORPORATION.

Plaintiff,

Case No. 05-40226 (FDS)

v.

ADVANCED FLEXIBLE COMPOSITES, INC.,

Defendant.

#### DECLARATION OF RUTH A. JAMKE

- I, Ruth A. Jamke, declare as follows:
- 1. I am employed by Saint-Gobain Performance Plastics Corporation ("Saint-Gobain") as a Research Associate and analytical chemist. I have a Bachelor's and a Master's degree in Chemistry. My job responsibilities include material characterization, failure analysis and microscopy. I started working at Chemfab Corporation in 1984 and have worked there continuously since then (including after it was merged with, and became known as, Saint-Gobain).
- 2. As part of my work, I reviewed and conducted a basic characterization of the AFC DuraChef<sup>®</sup> toaster belt in the fall of 2005. Gerard Buss, an R&D technician at Saint-Gobain and one of the named inventors on U.S. Patent No. 6,919,122 (the '122 patent), assisted me in this project. Both Gerard Buss and I work in Merrimack, New Hampshire.
- 3. Two AFC DuraChef® toaster belts were submitted for analysis: a black belt (which we identified as the "AFC Toaster Belt"); and a blue belt (which we identified as the

"Blue Antunes Belt"). The only apparent difference between the black and blue belts was the color.

- 4. Both the black and blue DuraChef® belts are flexible belts.
- 5. Both the black and blue DuraChef® belts have a reinforcement material having two faces. The reinforcement material is made of continuous filament fiberglass. Examination of the raw edge of the belt under a microscope shows that the reinforcement material is glass fiber, which has a unique appearance different from most synthetic fibers. Burning off the silicone coating on the black belt in a muffle furnace further confirmed the substrate as glass, since most synthetic fibers would not survive the 1200° F temperature used to burn off the coating.
- 6. A silicone coating is present on both faces of the reinforcement material.

  Fourier transform infrared spectroscopy (FTIR) performed on the main belt body (on both the black and blue DuraChef<sup>®</sup> belts) confirms the coating to be silicone rubber.
- 7. Based on a visual inspection of the black and blue DuraChef® belts, the belts have a multiplicity of ribs (sinusoidal in shape) raised above the first face of the reinforcement material. These ribs will impart lateral force to an object carried by the belt. In fact, Saint-Gobain's Chemsil® toaster belt uses sinusoidal ribs on the first face for this precise purpose: to prevent buns from slipping on the belt during toasting.
- 8. Based on a visual inspection of the black and blue DuraChef<sup>®</sup> belts, the belts have a multiplicity of ribs raised above the second face of the reinforcement material.
- 9. In both the black and blue DuraChef® belts, the ribs raised above the first face are raised above the first face by about .03 inches. A micrometer was used to determine the rib height above the first face, using the following methodology:

- (a) the thickness of the main belt plus the rib (on the first face) was measured in a number of different locations and averaged;
- (b) the thickness of the main belt was measured in a number of different locations and averaged;
- (c) the average thickness of the main belt (b) was subtracted from the average thickness of the main belt plus the rib (a) to derive the average approximate rib height above the first face of the reinforcement material.
- 10. Using this methodology on the black DuraChef<sup>eq</sup> belt, 36 measurements of the thickness of the main belt plus the rib were taken, 17 measurements of the thickness of the main belt were taken, and it was determined that the average approximate rib height above the first face was 31 mil (.031 inches) in the black belt.
- 11. Because the blue DuraChef<sup>®</sup> belt appeared to be similar in all respects to the black DuraChef<sup>®</sup> belt (except for the color), 3 measurements of the thickness of the main belt plus the rib (as a check of the results obtained with respect to the black belt) were taken, and it was determined that the average approximate rib height above the first face was 32 mil (.032 inches) in the blue belt.
- belt (different than the blue belt that was originally examined), so that the data collection for the blue belt was statistically similar to that for the black DuraChef® belt. Using a micrometer, I took 30 measurements of the thickness of the main belt-plus the rib, 30 measurements of the thickness of the main belt alone, and it was determined that the average approximate rib height above the first face of the reinforcement material was 31.2 mil (.0312 inches). This value lies within the rib height range (above the first face) identified in claim 1 of the '122 patent.

13. I also calculated the lowest and highest rib height above the first face of the reinforcement material in the blue DuraChef® belt. I calculated the lowest rib height by subtracting the maximum belt-only thickness figure from the minimum belt-plus-rib thickness figure, and found that the lowest calculated rib height was 27.4 mils (.0274 inches). I calculated the highest rib height by subtracting the minimum belt-only thickness figure from the maximum belt-plus-rib thickness figure, and found that the maximum calculated rib height was 35.2 mils (.0352 inches). Both of these values lie within the rib height range (above the first face) identified in claim 1 of the '122 patent.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Executed this 16th day of January, 2006, at Merrimack, New Hampshire.

Ruth A Jamke

#### **CERTIFICATE OF SERVICE**

I, Thomas I. Elkind, hereby certify that on January 17, 2006, a true copy of the Declaration of Ruth Jamke, filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NRF) and paper copies will be sent via Federal Express to those indicated as non registered participants, as well as to the following counsel for Defendant:

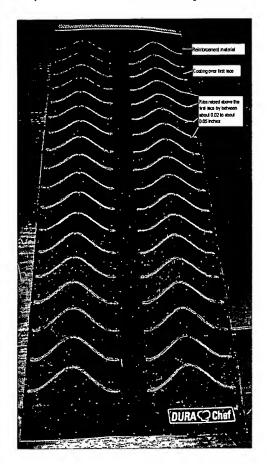
Stephen P. Carponelli, Esq. Carponelli &Krug 230 West Monroe Street, Suite 250 Chicago, IL 60606

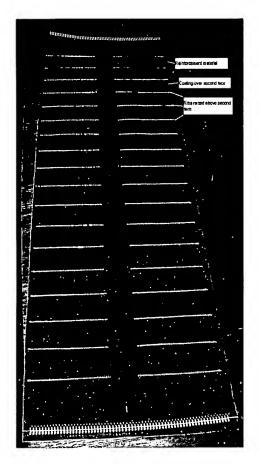
> /s/: Thomas I. Elkind Thomas I. Elkind, Esq.

patent claim is found in the accused device. Gen. Mills, Inc. v. Hunt-Wesson, Inc., 103 F.3d 978, 981 (Fed. Cir. 1997).<sup>7</sup>

As evidenced by the annotated photographs of both sides of AFC's (blue)

DuraChef® belt below (also attached to Compl., Ex. D (unannotated)),8 and the claim chart that follows, the accused device incorporates each of the limitations of claim 1 of the '122 patent.





An accused device that does not literally infringe a claim may still infringe under the doctrine of equivalents. *Cybor*, 138 F.3d at 1459. A device infringes under the doctrine of equivalents when there is not a substantial difference between the claimed invention and the accused product. *See CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). Because the AFC belts literally infringe claim 1 of the '122 patent, for purposes of this motion, it is not necessary to consider the doctrine of equivalents.

<sup>&</sup>lt;sup>8</sup> AFC also has sold a black DuraChef<sup>®</sup> belt, and the only apparent difference between the black and the blue versions was the color.  $(1/16/06 \text{ Declaration of Ruth A. Jamke}, \P 3-9.)$ 

#### MANUFACTURING

NUMBERS:

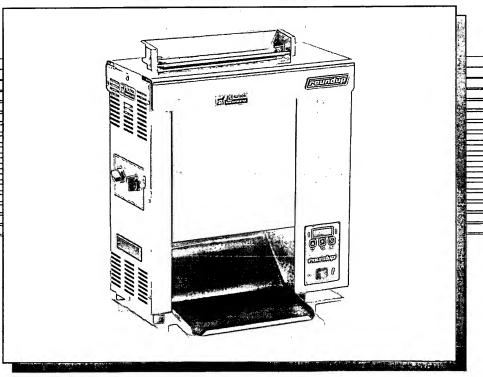




P/N 1010769 Rev. C 06/04



TOASTER
Model VCT-2000



Owners Manual



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#### OWNER INFORMATION

#### General

The Vertical Contact Toaster Model VCT-2000 is designed for contact toasting of buns. The toaster design allows the operator to place buns on both sides of the heated platen at the same time. Buns are placed into the top of the toaster and uniform, golden brown, warm buns are then retrieved at the base of the toaster.

This manual provides the safety, installation, and operating procedures for the Vertical Contact Toaster Model VCT-2000. We recommend that all information contained in this manual be read prior to installing and operating the unit.

Your Vertical Contact Toaster Model VCT-2000 is manufactured from the finest materials available and is assembled to Roundup's strict quality standards. This unit has been tested at the factory to ensure dependable trouble-free operation.

#### **Warranty Information**

Please read the full text of the Limited Warranty in this manual.

If the unit arrives damaged, contact the carrier immediately and file a damage claim with them. Save all packing materials when filing a claim. Freight damage claims are the responsibility of the purchaser and **are not** covered under warranty.

The warranty does not extend to:

- Damages caused in shipment or damage as result of improper use.
- · Installation of electrical service.
- · Normal maintenance as outlined in this manual.
- Malfunction resulting from improper maintenance.
- Damage caused by abuse or careless handling.
- Damage from moisture into electrical components
- Damage from tampering with, removal of, or changing any preset control or safety device.

IMPORTANT! Keep these instructions for future reference. If the unit changes ownership, be sure this manual accompanies the equipment.

#### VERTICAL CONTACT TOASTER

#### Service/Technical Assistance

If you experience any problems with the installation or operation of your unit, contact your local Roundup Authorized Service Agency.

Fill in the information below and have it handy when calling your authorized service agency for assistance. The serial number is on the specification plate located on the rear of the unit.

Purchased From:	
Date of Purchase:	
Model No.:	
Serial No.:	No.
Mfa. No.:	

Refer to the service agency directory included with your unit.

Authorized Service Agency

Name:	 	
Phone No.:	 	
Address:		

Use only genuine Roundup replacement parts in this unit. Use of replacement parts other than those supplied by the manufacturer will void the warranty. Your Authorized Service Agency has been factory trained and has a complete supply of parts for this toaster.

You may also contact the factory at 1-877-392-7854 (toll Free in the U.S.) or 630-784-1000 if you have trouble locating your local authorized service agency.

#### **IMPORTANT**

A.J. Antunes & Co. reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

#### IMPORTANT SAFETY INFORMATION

Throughout this manual, you will find the following safety words and symbols that signify important safety issues with regards to operating or maintaining the equipment.

# A WARNING A

GENERAL WARNING. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.

### A CAUTION A

GENERAL CAUTION. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment.

# A WARNING A

ELECTRICAL WARNING. Indicates information relating to possible shock hazard. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.

# **WARNING**

HOT SURFACE WARNING. Indicates information important to the handling of equipment and parts. Failure to observe caution could result in personal injury.



#### **IMPORTANT SAFETY INFORMATION (continued)**

In addition to the warnings and cautions in this manual, use the following guidelines for safe operation of the unit.

- · Read all instructions before using equipment.
- For your safety, the equipment is furnished with a properly grounded cord connector. Do not attempt to defeat the grounded connector.
- Install or locate the equipment only for its intended use as described in this manual. Do not use corrosive chemicals in this equipment.
- Do not operate this equipment if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
- This equipment should be serviced by qualified personnel only. Contact the nearest Authorized Service Facility for adjustment or repair.
- · Do not block or cover any openings on the unit.
- · Do not immerse cord or plug in water.
- · Keep cord away from heated surfaces.
- Do not allow cord to hang over edge of table or counter.

The following warnings and cautions appear throughout this manual and should be carefully observed.

- Turn the unit off, disconnect the power source, and allow unit to cool down before performing any service or maintenance on the unit.
- The toaster should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with separate electrical lines protected by fuses or a circuit breaker of the proper rating.

- Bread may burn. Therefore toasters must not be used near or below curtains or other combustible walls and materials. Failure to maintain safe operating distances may cause discoloration or combustion.
- When installing conveyor Belt Wrap, be careful not to wrap it over the upper and lower support rods or permanent damage to belt will occur. Make sure Belt Wrap is positioned UNDER the upper and lower support rods.
- Make sure both ends of Belt Wrap are aligned evenly before installing Belt Wrap Pin.
- Failure to use Release Sheets may result in damage to the equipment and loss of warranty coverage.
- · Do not clean this appliance with a water jet.
- If supply cord is damaged, it must be replaced by the manufacturer or its service agent, or a similarly qualified person.
- All electrical connections must be in accordance with local electrical codes and any other applicable codes.
- WARNING, ELECTRICAL SHOCK HAZARD.
   FAILURE TO FOLLOW THESE INSTRUCTIONS
   COULD RESULT IN SERIOUS INJURY OR
   DEATH.
  - Electrical ground is required on this appliance.
  - Do not modify the power supply cord plug.
     If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
  - Do not use an extension cord with this appliance.
  - Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.



#### **SPECIFICATIONS**

# Electrical Specifications at Listed Voltages NON-HEATED BASE UNITS

Model and Mfg. Number	Voltage	Watts	Amps	Hertz
VCT-2000CV 9210100	208	3291	15.8	60
VCT-2000CV 9210102	208	3291	15.8	60
VCT-2000CV 9210110	208	3291	15.8	60
VCT-2000CV 9210112	208	3291	15.8	60
VCT-2000HI 9210201	220 - 240	3019 - 3593	13.7 - 14.9	50
VCT-2000CV 9210300 Heated Base	208	3329	15.9	60
VCT-2000CV 9210304 Heated Base	208	3329	15.9	60
VCT-2000CV 9210308 Heated Base	208	3329	15.9	60
VCT-2000CV 9210310 Heated Base	208	3329	15.9	60
VCT-2000HI 9210401 Heated Base	220 - 240	3058 3640	13.9 - 15.2	50

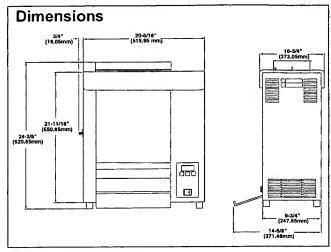
#### A WARNING A

ELECTRICAL SHOCK HAZARD. FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

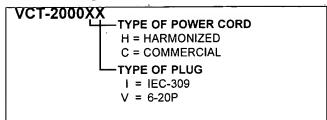
- · Electrical ground is required on this appliance.
- Do not modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
- Do not use an extension cord with this appliance.
- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.

#### A CAUTION A

All electrical connections must be in accordance with local electrical codes and any other applicable codes.



#### **Model Designation**



#### **Electrical Cord & Plug Configurations**

Letter Code*	Description	Configuration
СН	Commercial Cord Harmonized Cord	TO ME
(C)V**	6-20P, 20 Amp., 250 VAC., Non – Locking (Assembly Only).	
(H)I***	IEC-309, 16 Amp., 250 VAC., Pin & Sleeve (Assembly Only).	

<sup>\*</sup> Used in Model Designation

<sup>\*\*</sup> Indicates that the plug comes with a Commercial Cord

<sup>\*\*\*</sup>Indicates that the plug comes with a Harmonized Cord



#### **INSTALLATION**

#### Unpacking

- Remove the unit and all packing materials from shipping carton.
- 2. Open the included large box. It should contain the following:
  - Bun Chute (Figure 1) some models only.
  - · Bun Feeder (Figure 1) some models only.
  - 2 Release Sheets (Figure 1).
  - · Owner's Manual.
  - · Maintenance Card (some models only).
  - · Authorized Service Agency Directory.
- 3. Remove all shipping tape and protective coverings from the unit and parts.

NOTE: If any parts are missing or damaged, contact Antunes Technical Service IMMEDIATELY at 1-877-392-7854 (toll free in the U.S.) or 630-784-1000.

#### **Equipment Setup**

Before placing the toaster into service, pay attention to the following guidelines:

- Make sure power to the unit is off and the toaster is at room temperature.
- · Do not block or cover any openings on the unit.
- · Do not immerse cord or plug in water.
- · Keep cord away from heated surfaces.
- Do not allow cord to hang over edge of table or counter.
- Connect the unit to the proper power supply.
   Refer to the specification plate for the proper voltage

#### Assembling the Unit

NOTE: The factory has pre-installed a Release Sheet over the Platen (Figure 1). Verify that it is properly in place before proceeding.

 Remove Bun Chute and Bun Feeder from the box and install (Figure 1).

#### A CAUTION A

Failure to use Release Sheets may result in damage to the unit and loss of warranty coverage.

IMPORTANT: Make sure heat shield assembly is activating the Conveyor Safety Interlock Switch (see Figure 1). The conveyors will not rotate unless the Heat Shield is in place and Conveyor Safety Interlock Switch is activated.

#### A CAUTION A

Bread may burn. Therefore toasters must not be used near or below curtains or other combustible walls and materials. Failure to maintain safe operating distances may cause discoloration or combustion.

#### A WARNING A

ELECTRICAL SHOCK HAZARD. FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

- Electrical ground is required on this appliance.
- Do not modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
- Do not use an extension cord with this appliance.
- The toaster should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with separate electrical lines protected by fuses or a circuit breaker of the proper rating.
- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.

#### A CAUTION A

All electrical connections must be in accordance with local electrical codes and any other applicable codes.



#### **INSTALLATION** (continued) Bun Feeder (some models only). Release Sheet Heat Shield Retainer Clips **Bun Chute** Assembly connected over the Release bottom rear sup-Sheet port rod (some models only). Platen Rear Cleated Belt Wrap Rear Conveyor Belt Chain Front Conveyor Conveyor Safety Belt Chain Interlock Switch Front Cleated Belt Rear Conveyor Wrap Cover Assembly (with Roller Tensioner) Front Conveyor Cover Assembly **Bun Chute** (some models only). Roller Tensioner

Figure 1. VCT-2000 Toaster



#### **OPERATION**

#### **Operating Instructions**

 Set the Bun Thickness Adjustment Controls (Figure 3) to desired setting.

NOTE: Recommended settings are #2 for heel and #6 for crown.

 Turn the Rocker Switch (power On/Off) to ON. (Figure 2). Allow the toaster to warm-up for 30 minutes before proceeding.

NOTE: The temperature display (Figure 2) will flash "LO" until the toaster reaches its preset operating temperature. When the toaster approaches the preset temperature of 600°F (315°C), "USE" appears in the temperature display and the unit is ready to toast buns. If "USE" does not appear in the window after warm-up period of approximately 30 minutes, contact your Authorized Service Agency.

- 3. Drop Crowns and Heels into the slot (Figure 2). Cut sides of heel and crown must face each other.
- 4. Toasted buns will drop into the bun landing area (Figure 2) in approximately 10 seconds.
- 5. Test at least 4 buns before putting the toaster into service.
- Turn the Rocker Switch (power On/Off) OFF
  when finished toasting for the day and proceed with the *daily cleaning* as outlined in the
  Maintenance section of this manual.

#### **Temperature Adjustments**

The VCT-2000 uses a Platen Heater and two Auxiliary Air Heaters. The Platen Heater consists of a heating

NOTE: The toaster is tested and shipped with the heaters set at the above recommended temperatures.

Figure 3. Bun Thickness Adjustment Controls



#### TEMPERATURE CONTROL PANEL

NOTE: The term "setpoint temperature" refers to the desired temperature setting.

To display the actual Platen temperature - providing it is over 440° F (227° C), press the TEMP UP button.

To display the actual Auxiliary Air Heater temperature - providing it is over 360°F (182°C), press the TEMP DOWN button.

To switch the temperature display between Fahrenheit (°F) and Celsius (°C), press and hold the TEMP SCALE button for 5 seconds.

#### PLATEN HEATER TEMPERATURE ADJUSTMENT

- Turn the Rocker Switch (power On/Off) to ON and wait for the Temperature Display to finish the power up sequence (Figure 4).
- 2. Press and hold both TEMP UP and TEMP DOWN buttons for over 1 second until the display flashes the Platen setpoint temperature, then release (Figure 5).
- 3. Press the TEMP UP button to raise the setpoint temperature or press the TEMP DOWN button to lower the setpoint temperature.

NOTE: The Maximum Platen Setpoint Temperature is 600° F. If no change in temperature is made within 5 seconds, the display reverts back to the previous setpoint.

Release the button when the desired setpoint is displayed.

#### **AUXILIARY AIR HEATER TEMPERATURE ADJUSTMENT**

- Turn the Rocker Switch (power On/Off) ON and wait for Temperature Display to finish the power up sequence (Figure 4).
- 2. Press and hold both TEMP UP and TEMP SCALE buttons for over 1 second until the display flashes the setpoint temperature, then release (Figure 6).
- 3. Press the TEMP UP button to raise the setpoint temperature or press the TEMP DOWN button to lower the setpoint temperature.

NOTE: The maximum Auxiliary Air Heater Setpoint Temperature is 400° F

4. Release the button when the desired setpoint is displayed.

NOTE: If no change in temperature is made within 5 seconds, the display reverts back to the previous setpoint

TEMP

MANUFACTURING NUMBERS:

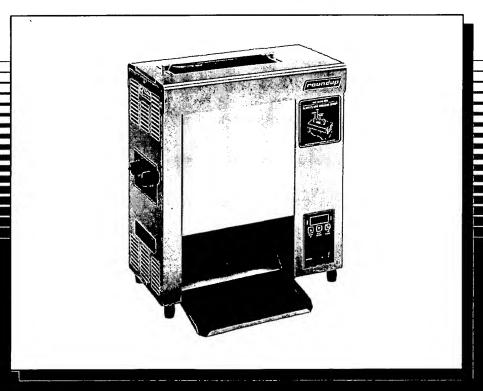
9200580 9200584 9200582



# VERTICAL CONTACT TOASTER

Model VCT-20 Deluxe





Owner's Manual

#### VERTICAL CONTACT TOASTER

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#### OWNER INFORMATION

#### General

The Vertical Contact Toaster Model VCT-20 is designed for contact toasting of buns. The toaster design allows the operator to place buns on both sides of the heated platen at the same time. Buns are placed into the top of the toaster and uniform, golden brown, warm buns are then retrieved at the base of the toaster.

This manual provides the safety, installation and operating procedures for the Vertical Contact Toaster Model VCT-20. We recommend that all information contained in this manual be read prior to installing and operating the unit.

Your Vertical Contact Toaster Model VCT-20 is manufactured from the finest materials available and is assembled to Roundup's strict quality standards. This unit has been tested at the factory to ensure dependable trouble-free operation.

#### **Warranty Information**

Please read the full text of the Limited Warranty in this manual.

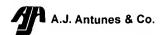
If the unit arrives damaged, contact the carrier immediately and file a damage claim with them. Save all packing materials when filing a claim. Freight damage claims are the responsibility of the purchaser and are not covered under warranty.

The warranty does not extend to:

- Damages caused in shipment or damage as result of improper use.
- Installation of electrical service.
- · Normal maintenance as outlined in this manual.
- · Malfunction resulting from improper maintenance.
- Damage caused by abuse or careless handling.
- Damage from moisture into electrical components
- Damage from tampering with, removal of, or changing any preset control or safety device.

IMPORTANT! Keep these instructions for future reference. If the unit changes ownership, be sure this manual accompanies the equipment.

#### VERTICAL CONTACT TOASTER



#### Service/Technical Assistance

If you experience any problems with the installation or operation of your unit, contact your local Roundup Authorized Service Agency.

Fill in the information below and have it handy when calling your authorized service agency for assistance. The serial number is on the specification plate located on the rear of the unit.

Purchased From:	
Date of Purchase:	
Model No.:	
Serial No.:	
Mfg. No.:	

Refer to the service agency directory included with your unit.

**Authorized Service Agency** 

Name:		
Phone N	lo ·	

Address:

Use only genuine Roundup replacement parts in this unit. Use of replacement parts other than those supplied by the manufacturer will void the warranty. Your Authorized Service Agency has been factory trained and has a complete supply of parts for this toaster.

You may also contact the factory at 1-877-392-7854 or 630-784-1000 if you have trouble locating your local authorized service agency.

#### **IMPORTANT**

A.J. Antunes & Co. reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

#### IMPORTANT SAFETY INFORMATION

Throughout this manual, you will find the following safety words and symbols that signify important safety issues with regards to operating or maintaining the equipment.

## A WARNING A

GENERAL WARNING. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.



GENERAL CAUTION. Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment.



ELECTRICAL WARNING. Indicates information relating to possible shock hazard. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.



HOT SURFACE WARNING. Indicates information important to the handling of equipment and parts. Failure to observe

## VERTICAL CONTACT TOASTER

In addition to the warnings and cautions in this manual, use the following guidelines for safe operation of the unit.

- · Read all instructions before using equipment.
- For your safety, the equipment is furnished with a properly grounded cord connector. Do not attempt to defeat the grounded connector.
- Install or locate the equipment only for its intended use as described in this manual. Do not use corrosive chemicals in this equipment.
- Do not operate this equipment if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
- This equipment should be serviced by qualified personnel only. Contact the nearest Roundup authorized service facility for adjustment or repair.
- Do not block or cover any openings on the unit.
- · Do not immerse cord or plug in water.
- · Keep cord away from heated surfaces.
- Do not allow cord to hang over edge of table or counter.

The following warnings and cautions appear throughout this manual and should be carefully observed.

- Turn the unit off, disconnect the power source and allow unit to cool down before performing any service or maintenance on the unit.
  - The toaster should be grounded according to local electrical codes to prevent the
    possibility of electrical shock. It requires a
    grounded receptacle with separate electrical
    lines, protected by fuses or circuit breaker of
    the proper rating.
- Bread may burn. Therefore toasters must not be used near or below curtains or other

combustible walls and materials. Failure to maintain safe operating distances may cause discoloration or combustion.

- When installing conveyor belt wrap, be careful not to wrap it over the upper and lower support rods or permanent damage to belt will occur. Make sure belt wrap is positioned UNDER the upper and lower support rods.
- Make sure both ends of belt wrap are aligned evenly before installing belt wrap pin.
- Failure to use release sheets may result in damage to the equipment and loss of warranty coverage.
- This appliance shall not be cleaned with a water jet.
- If supply cord is damaged, it must be replaced by the manufacturer or its service agent, or a similarly qualified person.
- All electrical connections must be in accordance with local electrical codes and any other applicable codes.
- WARNING, ELECTRICAL SHOCK HAZARD.
   FAILURE TO FOLLOW THESE INSTRUCTIONS
   COULD RESULT IN SERIOUS INJURY OR
   DEATH.
  - Electrical ground is required on this appliance.
  - Do not modify the power supply cord plug.
     If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
  - Do not use an extension cord with this appliance.
  - Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.



#### **SPECIFICATIONS**

#### **Electrical Specifications at Listed Voltages**

Voltage	Watts	Amps	Hertz
208	4000	19.2	50/60
220	4480	20.4	50/60
240	5322	22.2	50/60

#### A WARNING A

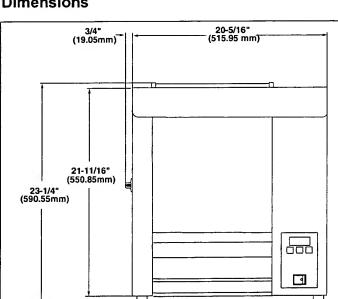
**ELECTRICAL SHOCK HAZARD. FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL** COULD RESULT IN SERIOUS INJURY OR DEATH.

- Electrical ground is required on this appliance.
- Do not modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
- Do not use an extension cord with this appliance.
- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.

#### **▲** CAUTION **▲**

All electrical connections must be in accordance with local electrical codes and any other applicable codes.

#### **Dimensions**

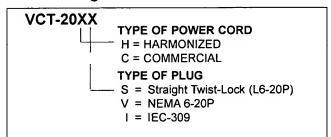


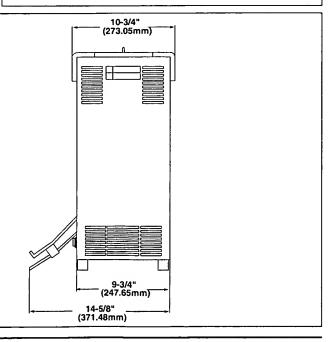
## **Electrical Cord & Plug Configurations**

		<u> </u>
Letter Code*	Description	Configuration
S	Straight Twist Lock 30 Amp, 250 VAC	
I	International Pin & Sleeve IEC-309 16 Amo, 250 VAC	
С	Commercial Cord	
Н	Harmonized Cord	

<sup>\*</sup> Used in Model Designation

#### **Model Designation**







#### INSTALLATION

## Unpacking

- Remove unit and all packing materials from shipping carton.
- 2. Open the included large box. It should contain the following:
  - bun chute (Figure 1)
  - release sheets (Figure 2)
  - · owner's manual
- Remove all shipping tape and protective coverings from the unit and parts.

**NOTE:** If any parts are missing or damaged, contact Antunes Technical Service IMMEDIATELY at 1-877-392-7854 or 630-784-1000.

#### Assembling the Unit

- Remove bun chute from the additional box and install (Figure 1.)
- 2. Remove the release sheet from the plastic bag and lay it on a clean, flat surface. Fold the sheet exactly in half (Figure 2).
- 3. Crease the sheet at the fold using only your fingers (Figure 2).

# IMPORTANT: Do not use metal tools to crease the release sheet.

- 4. Install the release sheet by draping it over both sides of the platen surface. The crease should be centered directly on top of the platen (Figure 3).
- 5. Install the heat shield. The heat shield clips fit over the top of the platen securing the release sheet (Figure 3).

#### **▲** CAUTION **▲**

Failure to use release sheets may result in damage to the unit and loss of warranty coverage.

**NOTE**: Check the release sheet to make sure it is not caught in the conveyor. Additional release sheets can be obtained through your authorized service agency under part no. 7000249 (3 pack) or 7000250 (10 pack).

IMPORTANT: Make sure heat shield assy. is activating (depressing) the conveyor interlock switch (see Figure 3). The conveyors will not rotate unless the heat shield is in place and interlock switch is activated (depressed).

6. Install power cord to the bottom of unit (Figure 1) (Mfg. No. 9200580 only).

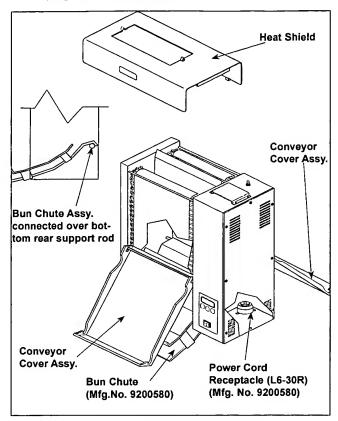


Figure 1. Installing Bun Chute

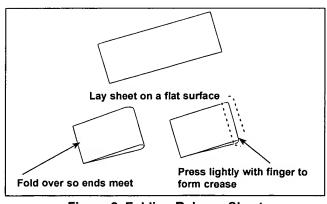
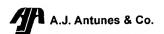


Figure 2. Folding Release Sheet



#### **Equipment Setup**

When placing the toaster into service, pay attention to the following guidelines.

- Make sure power to the unit is off and the toaster is at room temperature.
- · Do not block or cover any openings on the unit.
- · Do not immerse cord or plug in water.
- · Keep cord away from heated surfaces.
- Do not allow cord to hang over edge of table or counter.
- Connect the unit to the proper power supply.
   Refer to the specification plate for the proper voltage.

#### A WARNING A

ELECTRICAL SHOCK HAZARD. FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.

- · Electrical ground is required on this appliance.
- Do not modify the power supply cord plug. If it does not fit the outlet, have a proper outlet installed by a qualified electrician.
- Do not use an extension cord with this appliance.
- The toaster should be grounded according to local electrical codes to prevent the possibility of electrical shock. It requires a grounded receptacle with separate electrical lines, protected by fuses or circuit breaker of the proper rating.
- Check with a qualified electrician if you are in doubt as to whether the appliance is properly grounded.

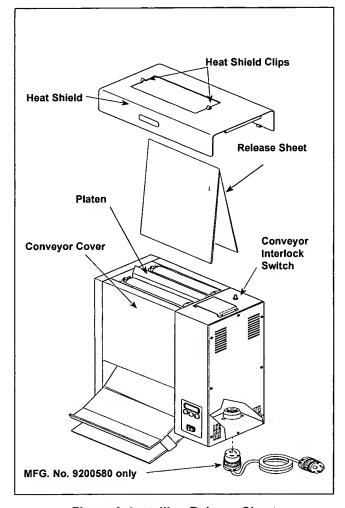


Figure 3. Installing Release Sheet

#### **▲** CAUTION **▲**

All electrical connections must be in accordance with local electrical codes and any other applicable codes.

#### **▲** CAUTION **▲**

Bread may burn. Therefore toasters must not be used near or below curtains or other combustible walls and materials. Failure to maintain safe operating distances may cause discoloration or combustion.



#### **OPERATION**

## **Operating Instructions**

1. Set the bun adjustment controls (Figure 5) to desired setting.

NOTE: Recommended settings are #2 (rear) for heel and #D (front) for crown.

 Turn the rocker switch (power on/off) to ON. (Figure 4). Allow 30 minutes warm-up time before proceeding.

NOTE: The temperature display (Figure 4) will flash "LO" until preset operating temperature is reached. When the toaster approaches the preset temperature of 600°F (315°C), "USE" will appear in the temperature display and the unit is ready to toast buns. If "USE" does not appear in the window after warm-up period of approximately 30 minutes, contact your Roundup authorized service agency.

- 3. Drop buns into toaster (Figure 4). Cut sides of heel and crown must face each other (crown in front, heel in back).
- 4. Toasted product will drop into the bun landing area (Figure 4).
- Test at least 4 buns before putting toaster into service.
- Turn the rocker switch (power on/off) OFF when finished toasting and procede with the daily cleaning as outlined in the maintenance section of this manual.

#### **Temperature Adjustments**

The VCT-20 uses a platen heater and two auxiliary heaters. The platen heater consists of a heating element built into the platen to toast the cut side of the bun. The two auxiliary heaters assist in providing additional heat to the buns. The first auxiliary heater is located between the conveyor in the front of the toaster. The second auxiliary heater is located between the conveyor and the rear of the unit.

#### **RECOMMENDED TEMPERATURES**

Recommended temperature setting for the platen heater is 600°F (315°C).

Recommended temperature setting for the auxiliary heaters is 420°F (216°C).

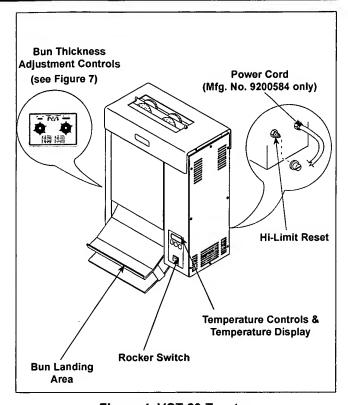


Figure 4. VCT-20 Toaster

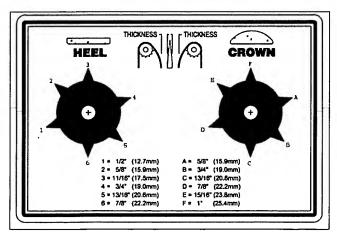


Figure 5. Bun Thickness Adjustment Controls

**NOTE**: The toaster is tested and shipped with the heaters set at the above recommended temperatures.



#### TEMPERATURE CONTROL PANEL

**NOTE:** Setpoint Temperature refers to the desired temperature setting.

Pressing the TEMP UP key will display the current platen heater temperature providing the platen temperature is over 440°F (227°C).

Pressing the TEMP DOWN key will display the current auxiliary heaters temperature providing the auxiliary heaters temperature is over 360°F (182°C).

Pressing TEMP SCALE key will switch the temperature display between Fahrenheit (°F) and Celsius (°C).

#### PLATEN HEATER TEMPERATURE ADJUSTMENT

- Turn rocker switch (power on/off) to ON and wait for temperature display to finish the power up sequence (Figure 6).
- Press and hold both TEMP UP and TEMP DOWN keys for over 1 second until the display flashes the setpoint temperature, then release (Figure 7).
- Press the TEMP UP key to raise the setpoint temperature or press the TEMP DOWN key to lower the setpoint temperature. The setpoint temperature will adjust 1° every 0.1 seconds.
- Release the key when the desired setpoint is displayed.

**NOTE:** If no change is made within 5 seconds, the display will revert back to the previous setpoint.

#### **AUXILIARY HEATER TEMPERATURE ADJUSTMENT**

- 1. Turn rocker switch on and wait for temperature display to finish the power up sequence (Figure 6).
- Press and hold both TEMP UP and TEMP SCALE keys for over 1 second until the display flashes the setpoint temperature, then release (Figure 8).
- Press the TEMP UP key to raise the setpoint temperature or press the TEMP DOWN key to lower the setpoint temperature. The setpoint temperature will adjust 1° every 0.5 seconds. Continuing to depress the key for over two consecutive seconds will increase the adjustment speed 1° every 0.1 seconds.
- Release the key when the desired setpoint is displayed.

**NOTE:** If no change is made within 5 seconds, the display will revert back to the previous setpoint.

#### **Safety Features**

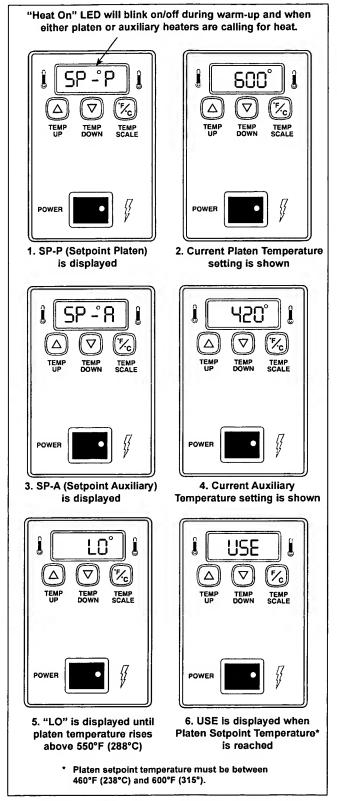


FIGURE 6. TEMPERATURE POWER UP SEQUENCE

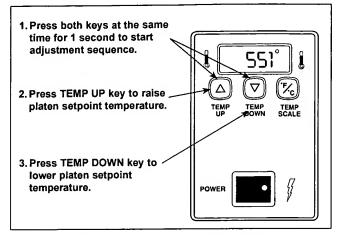


Figure 7. Adjusting Platen Heater Temperature Setpoint

#### HI-LIMIT RESET BUTTON

A hi-limit thermostat will turn off electrical power to the heater and control circuits if the unit overheats. To reset this thermostat, allow sufficient time (10-15 minutes) for the unit to cool down, then locate the reset button at the rear of the unit. Remove protective cap, depress the reset button, and reinstall protective cap (Figure 4).

**NOTE:** If the unit requires continuous resetting, contact your authorized service agency.

#### **FAULT MESSAGES**

- If the platen thermocouple is disconnected or "open", the display will read "HI" and the heating circuit will turn off (Figure 9). The platen thermocouple must be reattached or replaced.
- If the platen heater temperature exceeds 620°F
  (327°C) the display will read "HI" and the heating
  circuit will turn off (Figure 9). After the toaster has
  cooled down, the unit must be turned off, then back
  on to restart. If this condition repeats, contact your
  Roundup authorized service agency.
- If the auxiliary heating temperature exceeds 440°F (227°C) the display will alternately flash "HI" and the platen setpoint temperature (Figure 9). The heating circuit will not turn off. The toaster must be manually turned off and allowed to cool down. After the toaster has cooled down, the unit must be turned back on. If this condition repeats, contact your Roundup authorized service agency.

#### **FAULT MESSAGES (continued)**

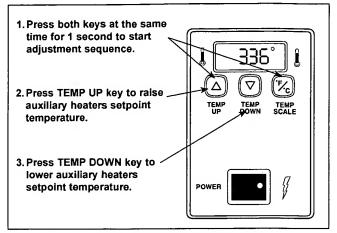


Figure 8. Adjusting Auxiliary Heaters
Temperature Setpoint

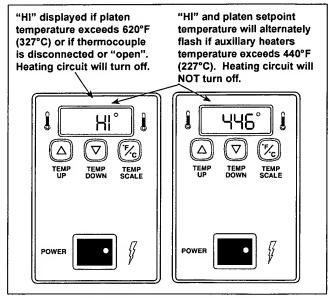


Figure 9. "HI" Fault Message

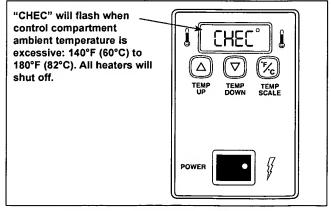


Figure 10. "CHEC" Fault Message



When this occurs, the temperature display will flash "CHEC" (Figure 10). To restart the unit, ambient temperature must drop to 140°F (60°C) and the unit must be turned off, then back on.

 If incoming power drops below 190 Volts, the toaster will shut down and the display will read "PO" (Figure 11). To reset, power supply must be over 190 Volts, then the unit must be turned off and back on.

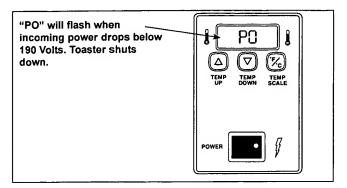


Figure 11. "PO" Fault Message

## **MAINTENANCE**

#### **▲** WARNING **▲**

Turn the unit off, disconnect the power source and allow the unit to cool down before performing any service or maintenance on the unit.

#### **▲** CAUTION **▲**

To prevent damage to the unit, do not use abrasive cleaners on the release sheet or belt wrap.

#### **▲** CAUTION **▲**

Failure to use release sheets may result in damage to the unit and loss of warranty coverage.

#### Daily

## CLEANING THE BLACK RELEASE SHEET, CONVEYOR BELT WRAPS AND TOASTER

#### Tools Required:

- · Heat resistant gloves
- · Clean, sanitized towels
- Scrub brush with Sanitizer Solution
- 1. Turn rocker switch (power on/off) to OFF, and allow the unit to cool sufficiently to handle.
- 2. Put on protective gloves. Remove heat shield, bun chute. (Figure 12).
- 3. Remove the release sheet. Wipe both sides of the release sheet with a *clean* towel and a warm sanitizer solution and allow to air dry.
- 4. Turn rocker switch (power on/off) to ON.
- 5. Depress and hold the activation button with one hand. Use your other hand, hold the scrub brush after dipping in sanitizer solution (Figure 12).

- 6. Use a back and forth motion covering the belt surface for 20 seconds per side (two rotations of the belt flap). Repeat on second belt (Figure 12)
- Turn rocker switch (power on/off) to OFF and unplug the power cord.
- 8. Wipe down the outside of the toaster with a clean, damp, sanitized towel and allow to air dry.
- Install the release sheet by draping it over both sides of the platen with the crease centered directly on the platen.
- Install bun chute so hooks are installed over the lower rear yellow support rod. Install the heat shield alligning clips over platen (Figure 3).

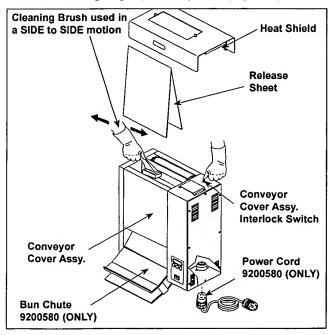


Figure 12. Components



#### Replacing Belt Wraps

- Turn rocker switch (power on/off) to OFF, unplug the power cord and allow the unit to cool down before proceeding.
- Remove the heat shield, Open the front conveyor cover, rear conveyor cover by lifting the covers in an upward motion then tilting the tops away from the unit. Remove the bun chute and release sheet (Figure 12).
- 3. Turn both bun compression control knobs to "6" (Figure 5).
- 4. Move belt wraps until connecting hinge is exposed and centered, then remove both front and rear belt wraps (Figure 13).
- The belt wraps must be installed properly in order to work correctly. Install the belt wraps as shown in Figures 14 & 15.
- 6. Install a new release sheet (Figure 12).
- Close the front conveyor cover and rear conveyor covers by lifting the covers and gently pushing upward and into the toaster util the covers latch onto the yellow support rods. (Figure 12).
- 8. Install bun chute and heat shield (Figure 12).

#### **▲** CAUTION **▲**

Be sure conveyor belt wrap ends are aligned as shown in Figure 15 or damage to the conveyor belt wrap will occur.

#### **▲** CAUTION **▲**

Be sure conveyor belt wrap is positioned UNDER the upper and lower yellow support rods or damage to the unit will occur.

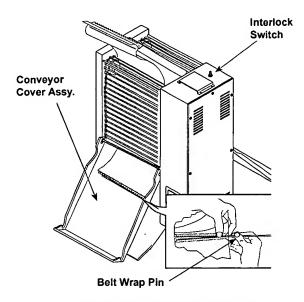


Figure 13. Removing Belt Wrap

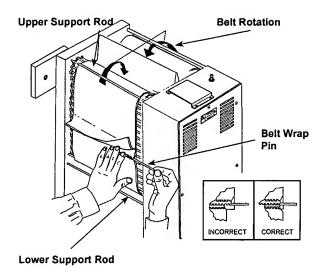


Figure 14. Installing Belt Wrap

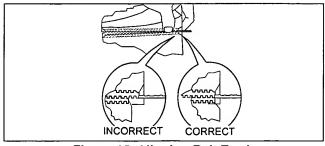


Figure 15. Aligning Belt Teeth



#### Stainless Steel Conveyor Belts

#### **▲** WARNING **▲**

Turn the unit off, disconnect the power source and allow the unit to cool down before performing any service or maintenance on the unit.

#### **SERVICING CONVEYOR BELTS**

After a period of time, the conveyor links will wear and the conveyor belt will stretch, eventually causing buns to stick. This is easily remedied by removing one or more conveyor links from each side of the belt. There are four 1/2" small links on each side of the conveyor belt. The rest of the links are large, 3/4" long (Figure 16).

#### **REMOVE CONVEYOR BELTS**

- Perform steps 1 4 under Replacing Belt Wraps on the previous page.
- Disconnect the conveyor belt by squeezing any two links together and unhooking both ends of one link (Figure 16).
- To shorten a stretched conveyor belt, remove one 1/2" link from the belt.
- 4. Reassemble the belt to the sprockets as described below.

**NOTE:** If the belt is too short to be reassembled, remove an additional 1/2" small link and install a 3/4" large link. This will shorten the belt 1/4" overall. See Figure 16 for links part numbers.

#### REPLACING CONVEYOR BELTS

- Remove old conveyor belt as described previously on this page.
- Place replacement conveyor belt on top sprockets. Check for correct positioning (Figure 16).

**NOTE:** Install conveyor belt so that the ends of the hooks are facing down (Figure 16).

- Wrap conveyor belt around lower sprockets and connect by hooking both ends of the belt back together.
- 4. Perform steps 5 11 under *Replacing Belt Wraps* (previous page).

**NOTE:** Make sure the conveyor belt is under the upper support rod and over the lower support rod.

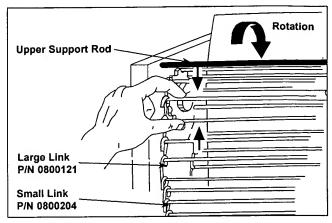


Figure 16. Removing Conveyor Belt

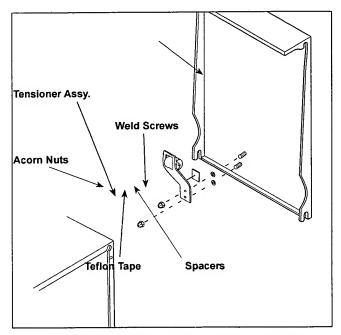


Figure 17. Replacing Roller Tensioner Assy.

#### Replacing Roller Tensioners

- 1. Remove acorn nuts (Figure 17).
- 2. Remove old roller tensioner assy.
- 3. Replace tensioner assy. and reassemble.
- Make sure the spacers are placed inside the tensioner arm. The spacers are smaller than the holes to allow the tensioner to pivot freely.

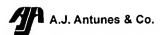


## **TROUBLESHOOTING**

## **▲**WARNING **▲**

To avoid possible personal injury and/or damage to the unit, inspection, test and repair of electrical equipment should be performed by qualified service personnel. The unit should be unplugged when servicing, except when electrical tests are required. Use extreme care during electrical circuit tests. Live circuits will be exposed.

Problem	Possible Cause	Corrective Action	
No Display.	Unit not plugged in. Circuit breakers tripped. Hi-Limit thermostat tripped.	Plug the unit into the proper electrical outlet. Reset the circuit breakers. Reset the Hi-Limit thermostat.	
Conveyor does not turn.	Compression settings incorrect.	Set HEEL to 2 and CROWN to D.	
	Safety Interlock Switch is not activating.	Cover is bent. Replace with P/N 0011491. Switch is broken. Contact your Authorized Service Agent.	
	Roller Tensioner bent or missing.	Adjust Roller Tensioner -13/16" (2.1 cm) or the height of a U.S. Nickel coin - from the bottom of the roller to the inner cover. Install new Roller Tensioner (P/N 7000186).	
·	Conveyor Belt Chain stretched.	Refer to the section titlted Servicing Conveyor Belts in this manual.	
	Motor drive chain is off sprocket.	Install chain and lubricate with CRC 3-36.	
	Motor does not operate.	Unplug toaster. Check all electrical connections. Replace motor - contact your maintenance person or Authorized Service Agency.	
Buns are sticking	Compression settings incorrect.	Set HEEL to 2 and Crown to D.	
	Belt wraps dirty or damaged.	Clean Belt Wraps as described in the Maintenance section of this manual. Inspect for damag (tears, hardened or brittle) and replace if necessary.	
	Release Sheet dirty or damaged.	Clean Release Sheet as described in the Maintenance section of this manual. Replace if scratched, torn, or has holes. Repleace with P/N 7000249.	
	Roller Tensioner missing or out of position.	Adjust Roller Tensioner -13/16" (2.1 cm) or the height of a U.S. Nickel coin - from the bottom of the roller to the inner cover. Install new Roller Tensioner (P/N 7000186).	
	Conveyor Belt not turning.	Remove Heat Shield, turn the power ON, and depress the Safety Interlock Switch button at the top of the unit. Verify drive mechanism is functioning.	
	Conveyor Chains turn but Belt Wrap does not.	Refer to the Maintenance section of this manual.	



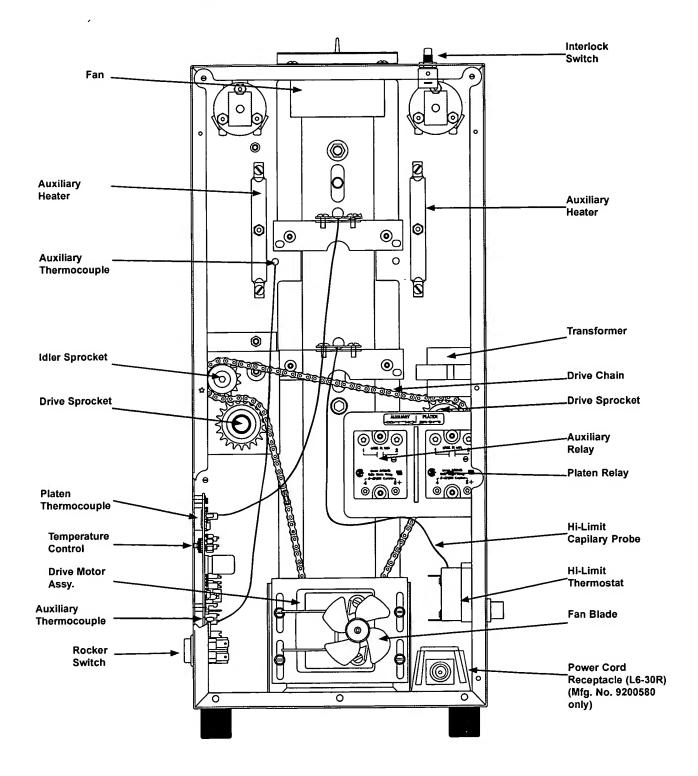
## **TROUBLESHOOTING** (continued)

Problem	Possible Cause	Corrective Action
Buns are sticking (continued).	Conveyor Belt not turning, Conveyor Chain not turning.	Verify Motor Chain is attached. Contact your maintenance person or Authorized Service Agency.
Buns are not toasting prop-	Compression settings incorrect.	Set HEEL to 2 and CROWN to D.
erly.	Temperature not set properly.	Verify the Platen setting is at 600° F (320° C) and the auxiliary setting is at 420° F (216° C). Refer to the instructions in the Operations section of this manual.
	Release Sheet needs Cleaning.	Clean Release Sheet as described in the Maintenance section of this manual. Replace if scratched, torn, or has holes. Repleace with P/N 7000249.
	Conveyor Belt Wraps need cleaning.	Clean Belt Wraps as described in the Maintenance section of this manual.
	Buns Cut improperly.	Contact your Bun Supplier.
Temperature display reads "LOW."	Platen temperature is below 420° F (216° C).	Allow the unit to warm up for 30 minutes and recheck the display. Contact your maintenance person or Authorized Service Agency.
Temperature Display flashes "PO."	Unit is receiving LOW voltage, below 190 volts).	Turn the Rocker Switch (power On/Off button) to OFF, then ON. If the display shows "PO" again, check the power cord and plug receptacle for damage. Reset circuit breakers located at teh store's power panels.  Contact your maintenance person or Authorized Service Agency.
Crown and/or Heel must be forced into toaster.	Heat Shield improperly installed or damaged.	Remove and reposition the Heat Shield or replace it.
	Conveyor Belt Wrap not tacky (sticky).	Clean Belt Wraps as described in the Maintenance section of this manual. Inspect for damag (tears, hardened or brittle) and replace if necessary.
	Crown and/or Heel not properly inserted into toaster.	Buns must be inserted with the cut sides facing each other. Crown in front, Heel in rear.
	Release Sheet is sticky and /or not smooth.	Clean Release Sheet as described in the Maintenance section of this manual. Replace if scratched, torn, or has holes. Repleace with P/N 7000249.
Conveyor Belt Wrap does not fit, is difficult to install,	Conveyor Belt Wrap installed improperly.	Install belt wraps as described in the Maintenance section of this manual.
or is not long enough.	Conveyor Belt Wrap is damaged.	Replace with P/N 7000192.



## PARTS IDENTIFICATION

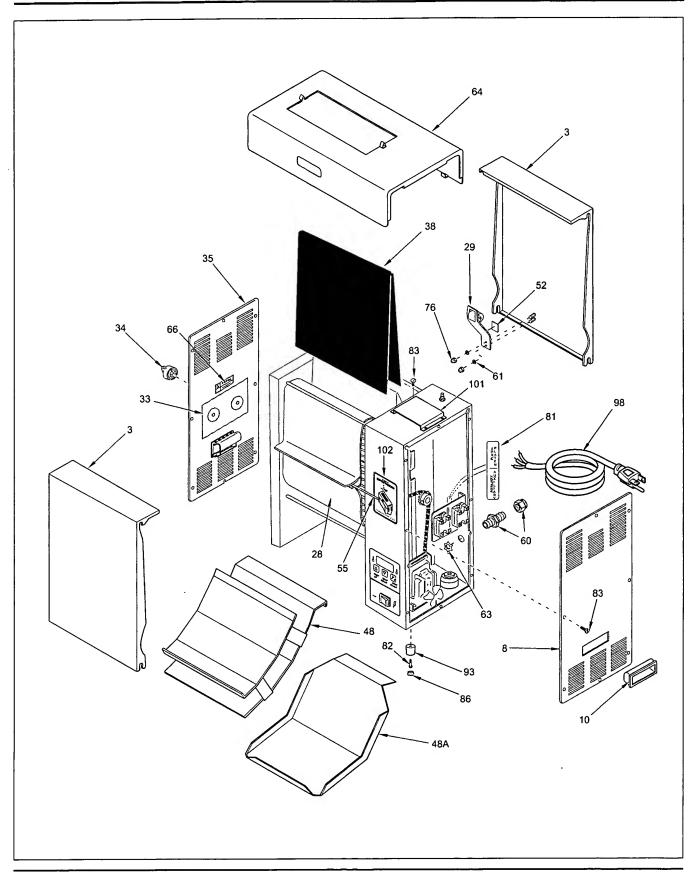
#### **Parts Identification**

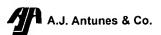




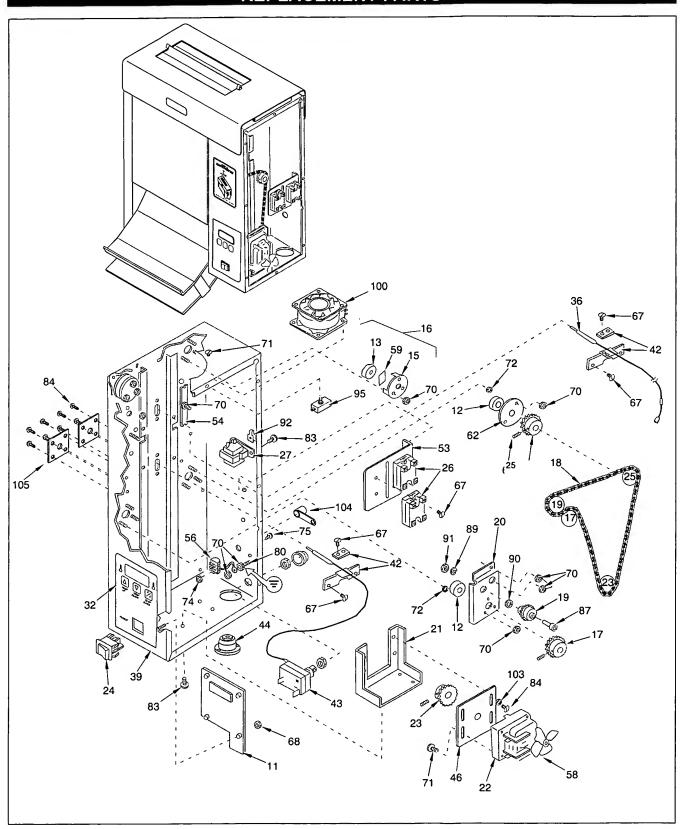
		REPL				Deparinties	^-
tem	Part No.	Description	Qty.	Item	Part No.	Description	Qt
1	0011266	Conveyor Belt	2	50	7000165	Auxiliary Thermocouple Kit	1
	0800204	1/2" Pitch Link, Small	2	51	7000200	Platen (208 VOLT)	1
	0800121	3/4" Pitch Link, Large	38	52	2100252	Teflon Tape	4
2	2150117	ldler Shaft	2	53	0503359	Bracket, Relay	1
3	0011329	Conveyor Cover Assy.	2	54	0503150	Heater Clip	2
4	0010475	Tensioner Assy. (Incl. #40, 76, 85)	4	55	303P125*	Hinge Pin, Belt Wrap	2
5	0800332	Rod, Conveyor Cover	4	56	4060355	Terminal Block (9200584 Only)	1
6	2150190	Sprocket	8	57	0503533	Bracket, Auxiliary Thermocouple	1
7	7000199*	Spacer Kit	2	58	4000170	Fan Blade, Motor	1
8	0011444	Control Housing Cover Assy.	1	59	2100256	Teflon Tape	8
9	2150118	Drive Shaft	2	60	0400315	Strain Relief (9200584 Only)	1
10	2100212	Handle	2	61	0502199	Spacer	4
11	7000241	Control Board	1	62	0500464	Retainer, Bearing	1
12	2150158	Ball Bearing	2	63	0400138	Locknut, 1/2" (9200584 Only)	1
13	2150186	Teflon Bearing	6	64	0011528	Heat Shield Assy.	1
15	0503376	Bearing Retainer	6	65	325P163*	Setscrew, 1/4-28 x 5/16"	8
16	7000167	Bearing & Retainer Kit	1	66	100P864*	Label, Caution Hot	1
	, , , , , , , , , , , , , , , , , , , ,	(Includes #13,14,15 & 59)		67	308P115*	Screw, #8-32 x 3/8" (10 mm)	2
17	2150193	Drive Sprocket, Front	1	68	304P105*	Nut, #4-40, "KEPS"	4
18	2150187	Drive Chain	1	69	406P107*	Cable Tie	1
19	0011299	Idler Sprocket & Bearing	1	70	308P143*	Nut, #8-32, "KEPS"	6
20	0501232	Bracket, Idler Sprocket	1	71	310P154*	Screw, #10-32 x 3/8"	2
21	0503589	Bracket, Motor Mounting	i	72	310P140*	Washer, #10	6
22	7000240	Drive Motor Kit, Dual Frequency	•	73	308P101*	Nut, #8-32	;
22	7000240	50/60 Hz (Incl. #58)	1	74	306P101*	Nut, Hex, #6-32	:
22	2450440	•	'	75	306P123*	Screw, #6-32 x 7/8"	:
23	2150110	Motor Sprocket (#s 9200580 & 9200854		76	308P145*	Nut, Hex Acorn, #8-32	1
	2150177	Motor Sprocket (#9200582)	1			· · · · · · · · · · · · · · · · · · ·	
24	2150177	• • •	1	77	100P900*	Label, Service	1
24	4010137	Rocker Switch, On/Off (250 VAC)	1	78	325P104*	Washer, 1/4"	
25	2150109	Drive Sprocket (Rear)	2	79	325P109*	Screw, 1/4-20 x 1/2"	4
26	405K125	Relay, Solid State		80	308P124*	Screw, 1-Way, #8-32 x 1/2"	•
27	4010187	Transformer (Date 6)	1	81	10P1022*	Label, Heaters	
28	7000192	Conveyor Belt Wrap (Pack of 2)	1	82	310P136*	Screw, #10-32 x 1-1/4"	4
29	7000186	Roller Tensioner Assy. (Pack of 2)	1	84	308P157*	Screw, Tap, #8-32 x 3/8"	4
30	0503496	Tensioner Bracket, Right	2	85	308P183*	Screw, Hex Hd., #8-32 x 3/8"	2
31	0503497	Tensioner Bracket, Left	2	86	218P145*	Cover, Leg, Bumper	4
32	1001037	Label, Control	1	87	331P103*	Shoulder Bolt, 5/16-18 x l"	•
33	1001069	Label, Dial Compression	1	88	306P105*	Screw, #6-32 x 1/2"	1
34	2100253	Knob, Control	2	89	331P106*	Lockwasher, 5/16"	•
35	0011445	End Housing Cover Assy.	1	90	212P118*	Flat Washer, 5/16"	
36	4050214	Thermocouple Assy.	1	91	331P101*	Nut, Hex, 5/16 x 18"	•
37	0021170	Weldment, End Housing	1	92	300P102*	Nut, Tinnerman	:
38	7000249	Release Sheet (Pack of 3)	-	93	210P230	Bumper, Recess Leg, 1"	4
	7000250	Release Sheet (Pack of 10)	-	94	0503495	Retainer, Tensioner Bracket, RH	•
39	0021245	Control Housing	1	95	0503507	Retainer, Tensioner Bracket, LH	
	0021169	Control Housing (9200584 Only)	1	96	2100259	Slide Bar	4
40	7000121	Slide Rail Kit (Includes 2		97	4010107	Interlock Switch	
		slide rails for tensioners)	2	98	0700479	Power Cord Assy. (9200584 Only)	
41	0021207	Conveyor Cam	2		0700588	Power Cord Assy. (#9200582 Only)	
42	7000176	Thermocouple Retainer Kit	2	99	306P104*	Screw, #6-32 x 1/4"	(
43	4030332	High Limit Thermostat	1	100	4000138	Fan	
44	4060369	Flanged Inlet, Male	1	101	0503115	Duct, Fan	
45	0503455	Tension Spring, Inner	4	102	1001056	Label, Crown & Heel	
	0503455	Bracket, Motor	1	1			
46 47			'	103	2120147*	Leg Spacers	•
47 40	0700580	Wire Set (not shown)		104	4060374	Grounding Lug	•
48 40 ^	0021228	Bun Chute	1	105	0503858	Cam Locking Plate	•
18A	0503385	Bun Chute (9200584/9200582 Onl	y) 1	+ 0-4	y available in p	sakanaa af 40	



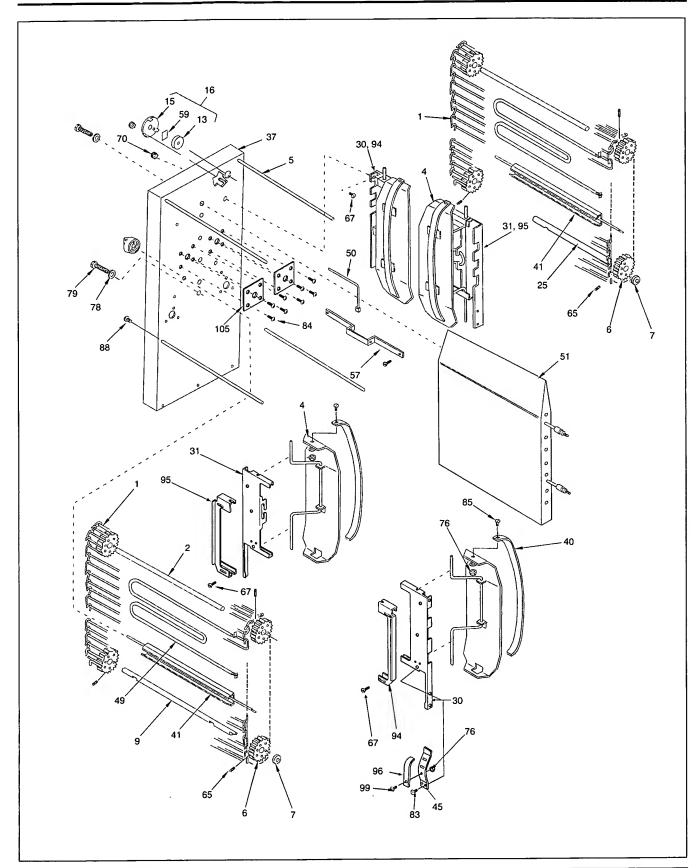


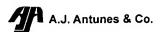


## **REPLACEMENT PARTS**



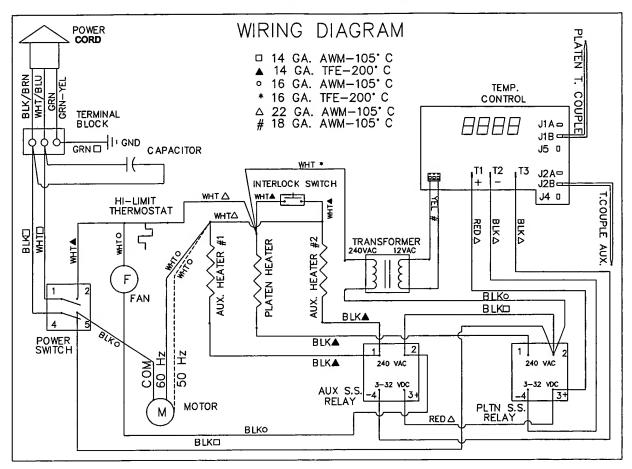






## **WIRING DIAGRAM**

## **Pictorial Wiring Diagram**



#### LIMITED WARRANTY

Equipment manufactured by Roundup Food Equipment Division of A.J. Antunes & Co. has been constructed of the finest materials available and manufactured to high quality standards. These units are warranted to be free from mechanical and electrical defects for a period of two years from date of purchase or 30 months from shipment from factory, whichever occurs first, under normal use and service, and when installed in accordance with manufacturer's recommendations. To insure continued proper operation of the units, follow the maintenance procedure outlined in the Owner's Manual. During the first 12 months, all parts and non-overtime labor and travel expenses within a 50 mile/80 km not (100 mile/160 km, 2 hour round trip) radius of the nearest Authorized Service Center are covered; during the 13<sup>th</sup> to 24<sup>th</sup> month, parts only are covered (no labor or travel expense).

- 1. This warranty does not cover cost of installation, defects caused by improper storage or handling prior to placing of the Equipment. This warranty does not include overtime charges or work done by unauthorized service agencies or personnel. This warranty does not cover normal maintenance, calibration, or regular adjustments as specified in operating and maintenance instructions of this manual, and/or labor involved in moving adjacent objects to gain access to the equipment. This warranty does not cover consumable items such as platen release sheet and conveyor belt wraps. Travel time and mileage in excess of 50 miles from the nearest authorized service agency is not covered under this warranty.
- 2. Roundup reserves the right to make changes in design or add any improvements on any product. The right is always reserved to modify equipment because of factors beyond our control and government regulations. Changes to update equipment do not constitute a warranty charge.
- 3.If shipment is damaged in transit, the purchaser should make a claim directly upon the carrier. Careful inspection should be made of the shipment as soon as it arrives and visible damage should be noted upon the carrier's receipt. Damage should be reported to the carrier. This damage is not covered under this warranty.
- 4. Warranty charges do not include freight or foreign, excise, municipal or other sales or use taxes. All such freight and taxes are the responsibility of the purchaser.
- 5.THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL ROUNDUP BE LIABLE FOR SPECIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFORMANCE OF THIS WARRANTY.



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